



Farmland conversion to fight climate change? Resource hierarchies, discursive power and ulterior motives in land use politics

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ABSTRACT

In December 2013, local politicians celebrated with a champagne toast as the municipality of Trondheim received permission from the Ministry of Local Government and Modernisation to develop 110 ha (272 acres) of high quality farmland for housing and business. The primary reason for this decision was the promotion of a more climate-friendly city. The land in question had been singled out as especially important for agriculture in previous planning processes. Based on documents, media texts and interviews, this article utilises situational analysis to scrutinise this puzzling political decision. It emphasises the importance of discourse in local decision making regarding scarce resources. Local interests and global issues are connected and made sense of in what Foucault (1972) called a “system of meaning”, which allows powerful economic interests and climate change mitigation measures to justify the permanent loss of farmland. As food production is invisible on the local political agenda, the re-implantation of multifunctional urban agriculture in the local food system could be a viable approach to slow further conversion of high quality farmland on the urban fringe.

1. Introduction

Farmland is disappearing under urban expansion all over the world, although feeding the rapidly growing global population is one of the great challenges of our time. Most biological processes that sustain animals and plants depend on soil, making it valuable in ecological and economic terms. Soil is a renewable resource when sustainably managed, but its potential for food production is lost forever when put under asphalt (Ingram et al., 2010).

Major cities have thrived when the conditions for food production permit dense settlements. Yet, urbanisation means that built-up areas gradually expand at the expense of farmland. The highest quality agricultural land is often on the outskirts of areas with high population pressure because rich farmland was often a reason for settlement in the first place. The loss of farmland to urban growth has been accelerating since World War II. Although productivity increases in agriculture have largely compensated for land loss, the resource base for agriculture is shrinking on a global scale. Coupled with deterioration in the capacity of soil ecosystems to provide high yields, the shrinking resource base for food production has aroused concern for preserving arable land (FAO, 2015).

Europe is characterised by limited farmland in relation to its high population concentrations, whereas North America is less densely populated and has a larger proportion of agricultural land. Yet, the loss of high quality soil is a matter of serious concern on both continents. In

Asia, the combination of rapid population growth and urbanisation has also threatened farmland. In recent years, the amount of high quality cultivated land in China has been shrinking in response to a governmental policy of moving large rural populations into new, centrally planned villages (Fang et al., 2016; Li et al., 2014; Long et al., 2016; Tang et al., 2015; Yu et al., 2017) and, therefore, not much land is left for reclamation (Xin and Li, 2018). China is increasingly outsourcing its food production to developing countries, stimulating a global rush to acquire farmland (McMichael, 2012a). Investment in land in the global South increased after the 2007–2008 crisis in food prices. Competition to acquire farmland has intensified around the world.

In contrast, farmland seems to be of low economic value in Norway, even though the country has relatively little arable land in its total land area. Paradoxically, by Norwegian standards, a large-scale conversion of high quality agricultural land into urban housing and industry was justified in the municipality Government of Trondheim by the argument that this development mitigates climate change. Drawing on discourse (Foucault, 1972; Fairclough, 1995) and narratives (Czarniawska, 1997) as conceptual tools, this paper provides an in-depth study of the knowledge claims behind a decision to convert farmland into urban purposes. It examines a case of farmland conversion that was politically adopted under a pretext of being environmentally friendly, whilst it is mostly municipal- and developer economy-friendly. In a discourse that pitted environmental goals against continued agricultural production, global environmental

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benefits served as a rationale for urban expansion. First, the paper presents the climate narrative that rationalises the decision. Then, it identifies an appropriated planning language and the manner in which farmland is made invisible as characteristics of the narrative. Later, the paper points to political and economic motives of the decision-makers by examining how financial logic permeates an area policy that is seemingly based in environmental principles of CO₂ reduction. It concludes by addressing how the discourse both secures power to the joint interests of municipal politicians and farmers who have become property developers and disguises the most climate-friendly housing options.

2. Farmland governance and policy

Land use can be seen as a mosaic of cooperating as well as competing interests. In his classic article “The Growth Machine” (1976), Harvey Molotch described coalitions between landowners and developers with public officials to support continued growth. Large economic values are at stake in how areas are defined in land use plans. On the urban fringe, many interests conflict with farmland, especially transport infrastructure and residential development. Planning is supposed to ensure democratic decision making and balance differing interests with one another. According to *Hajer* (1989: 21), planning can be defined as “the activity of the state organising the use of space”. Here, different actors engage in argumentation for different outcomes. The way these arguments are framed heavily influences what decisions are made.

Competition between municipalities in securing resources lies at the heart of politics (*Molotch, 1976*). In an economic logic, the value of a farm field in the real estate market greatly exceeds its agricultural production value. Planners have been concerned with how to control urban sprawl and keep cities from devouring their hinterlands. Some reasons for preserving farmland focus on the resource itself: sustaining food production, securing biodiversity, preserving open space and controlling floods (*Tomlinson, 2013; Newman et al., 2015; Wästfelt and Zhang, 2016; Brinkley, 2017*). Other arguments have pointed out that farmland preservation mitigates the negative side effects of cities by curbing sprawl and increasing housing density, thus limiting motor vehicle traffic, pollution and costly infrastructure, and preserving ecosystems (*Cadieux et al., 2013*).

A wide variety of policy tools are used to manage urban sprawl as well as preserve the open countryside and the productive agricultural land on the fringe of large cities. National laws and processes for protecting farmland differ significantly. Ensuring that farmland cannot be converted into more profitable uses requires intervention in the land market (*Nelson, 1990*). The purchase of development rights by public or private trusts is a common method of land conservation in North America (*Bengston et al., 2004*), whilst legal regulation by the central or local government is more typical in Europe (*Koomen et al., 2008; Tan et al., 2009*). The European Union lacks a common farmland policy; although EU land policy guidelines were endorsed in 2004, they have not been recognised in practice. In 2015, over 70 civil society organisations joined Via Campesina Europe in a petition, “Preserving and managing European farmland as our common wealth”, to make sustainable governance of farmland more explicit (*European Confederation Via Campesina et al., 2015*). Improving urban residents' access to land can strengthen public support for farmland preservation. Although faced with financial challenges, programs for community land access in British Columbia, Canada, have proven to foster an improved connection between city dwellers and suburban farmland (*Wittman et al., 2017*).

The reasons put forward for protecting Norway's farmland have varied over time. Protecting the remaining farmland has been seen as a matter of societal security justified by making the country more resilient in the face of crisis (*Vinge, 2015*). Only 48.6 per cent of agricultural calories consumed in Norway were produced nationally in 2016 (*Norwegian Agricultural Authority, 2017*). This is just below the

level that has historically been deemed necessary for national security, a goal first described in policy papers in 1975 (*White Paper 32, 1975–76*). Norway, as a non-EU member, protects its agricultural market with toll barriers, but, in 1991, adjustment to EU policy led to the removal of self-sufficiency as an official political goal (*Almås, 2002*).

Norway is a land of mountains and forests, and productive farmland comprises only 3 percent of its total land area, compared to 25 percent in the United Kingdom, 17 percent in the United States and 11 percent in China (*World Bank, 2016*). Since the 1970s, Norwegian agricultural policy has treated maximum utilisation of the country's natural resources as a core value (*Almås, 2002*). Grain production is concentrated in areas with suitable temperature, precipitation and soil quality, whilst dairy farming is concentrated in the less favourable mountainous and northerly areas. An extensive body of research has examined the quantity of land that has been converted into non-agricultural purposes in Norway (*Grønningsæter and Aurbakken, 2009; Fystro, 2010; Straume, 2013*). Other research has identified main drivers for urban development on farmland (*Falleth and Saglie, 2007; Slätmo, 2014; Skog and Steinnes, 2016*). However, surprisingly little research has examined decision making on farmland in land use planning. This article scrutinises the knowledge claims used in the political decisions regarding farmland conversion.

3. Conceptual tools: situational analysis to examine power in a political process

Situational analysis, first described by Adele *Clarke* (2005), is designed to investigate a complex situation with multiple arenas, levels and events in a systematic way (*Christensen and Casper, 2000; Friese, 2009, 2010; Kalenda, 2016; Washburn, 2013*). This approach helps the researcher navigate situations with a plethora of data both to analyse power relations and represent the diversity of perspectives in the situation. In contrast to the grounded theory approach described by *Glaser and Strauss* (1967), situational analysis focuses on differences rather than commonalities. *Clarke* emphasised that language and materiality must be analysed symmetrically. By using the situation as the basis for the analysis and explicitly including all analytically relevant non-human elements alongside the human, the researcher can identify how different circumstances appear as significant in the empirical situation, and who is constructing what and why (*Clarke, 2009*).

3.1. Power through discourse, narratives and knowledge claims

Discursive material is central for analysing situations of power, according to *Clarke* (2005). The term discourse points to a certain methodology for analysing social interaction and meaning creation as a key part of a societal process. Michel Foucault wrote that “discourse is the power which is to be seized” (*Foucault, 1981: 53*). In political conversation, discursive power is of vital importance, influencing everything from what is defined as the problem to be solved in the political arena to the reasons that are chosen for solving the problem in a particular way. Power also comes into play when specific knowledge regimes are used to legitimate a certain point of view. Discourse has been supported by institutions and created and reinforced by a wide range of everyday practices (*Foucault, 1981*).

The social construction of knowledge that is taken for granted and comes into play in language and social interaction was analysed by *Berger and Luckmann* (1967). In planning processes, politicians must prioritise societal goals and values. Certain modes of argumentation can attain a hegemonic position in the discourse. Some actors are heard, whilst other voices are excluded. Powerful actors with specific interests and objectives can influence land use planning processes in both subtle and obvious ways. *Bunce* (1998) showed how the discursive power to “construct ‘systems of meaning’” (*Foucault, 1972*) around the urbanisation of agricultural land has had a significant influence over farmland

preservation policy” (Bunce, 1998: 235).

Discourse analysis has proven to be a useful tool for exploring how meaning is created, challenged and maintained in political processes (Alvesson and Kärreman, 2000). Policy making can be regarded as a struggle between different discourses concerning how issues should be conceptualised and negotiated (Fairclough, 1995). A taken-for-granted argument can become a “fact” and does not need to be justified (Meyer and Rowan, 1977). Identifying arguments that are implicitly accepted reveals the discursive mechanisms that lead to certain actions and choices (Neumann, 2001). Czarniawska (1997) showed that stories are central for legitimising political decisions.

Farmland can become a physical symbol for a range of meanings and emotional values. Feitelson (1999) found that the rationale for Israel's protection program changed as what were seen as societal problems shifted, and the desired outcome was reframed as a solution to those problems, rather than the other way around.

This article examines how the discourse on farmland can make certain decisions possible or inevitable, as well as empower certain stakeholders and disempower others by using a situation as a focal point for inquiry (Clarke, 2009). Focusing on what meanings are attributed to farmland, how categorical distinctions come into play, and the perceptions and positions of influential actors in land use planning debates, this paper highlights the knowledge claims underpinning the decision to convert agricultural land to urban purposes. In the hands of self-interested parties, global environmental discourses can prevail over local definitions of the common good.

3.2. The Trondheim case

3.2.1. Resources at issue

The climatic conditions in Norway limit the area suitable for grain production. Grassland farming is the only option in many parts of the country and cultivating feed grain takes up the major arable areas. The greater Trondheim area examined in this case study has the climatic and topographic conditions for both seed and grain production and, along with east and south-western Norway, is amongst the most suitable areas for growing grain. Trondheim is a coastal city in central Norway with 185,000 inhabitants, making it the third largest city in the country. Another 95,000 people live within a 1-h driving distance from the city. The region has a common labour market with a commuter population living in the smaller towns surrounding the fjord. The Trondheim region is experiencing as high as a 1.2 percent population increase annually, which is a relatively high growth rate by Norwegian standards (Trondheimsregionen, 2016).

The two farms at issue in this controversy consist of high quality grain land (See Fig. 1). The landscape can be classified as ‘agri-burbia’—a suburban area where farming is still an important land use (Newman et al., 2015). The Øvre Rotvoll and Overvik family farms are located in the rapidly expanding eastern area of the city, in between large areas of suburban housing. As the city has grown around it, this farmland has been preserved for its high quality, its cultural and historic value and its aesthetic and recreational qualities. One of the most heavily trafficked thoroughfares in and out of the city centre cuts straight across the Øvre Rotvoll farmland. The farm has lost large amounts of land to transport infrastructure by public expropriation over several decades making the land increasingly difficult to farm. In 2012, when a new generation took charge of the Øvre Rotvoll farm, they decided to convert the land into residential and business uses. They established a property development company, hired a former Labour Party municipal politician as managing director, engaged consultants in environmental assessments and architectural matters and approached politicians with a well-prepared proposal. Then, the Overvik family presented a similar proposal for developing the land on their farm.

3.2.2. Institutional system

Decisions on land use are made as part of area planning processes

when politicians decide where new areas for housing, industry and other societal functions will be. Like most Norwegian municipalities, Trondheim has a representative parliamentary system in which alliances between parties are important in securing decisions. Farmland is governed by the Norwegian Constitution §110b and the Land Act, which states that “cultivable land must not be disposed of in such a way as to render it unfit for agricultural production in the future” (Land Act of 1995, §9). However, the law allows its conversion into other uses if, “after an overall evaluation of the circumstances”, the Ministry “finds that the agricultural interests should not have priority” (Land Act of 1995, §9). The Ministry of Modernisation and Municipal Affairs formulates this judgment based on decisions made by local politicians in municipal plans. The conversion of farmland into urban uses thus requires a local political decision and approval by central government officials. The “overall evaluation of the circumstances” leaves a great deal of room for judgment. It is up to local politicians to use their discretion in deciding to preserve farmland. Neoliberalism, which implies a market rationale as the organising principle for society (McMichael, 2012b), is hegemonic at the national level in Norway, both discursively and in the coalition of Liberal, Conservative and Libertarian parties that have held power since 2013–2014.

3.2.3. The decision

The decision to allow the urban development of 110 ha (272 acres) of high quality farmland was made by the Trondheim City Council on 21 March 2013. The decision was based on a projection of high population growth. The majority, consisting of the Labour, Socialist Left, Liberal and Conservative parties, added this comment to the decision:

The areas that have been decided to convert in the area plan imply that Trondheim will be built inward, or densified. In the environmental package for transport, the city council has set a target that 80 percent of new homes will be in the form of densification. They point out that areas between existing residential areas, such as the areas that are proposed for residential purposes in this case, must be understood as densification of the city in this context (Minutes, City Council, 21.03.2013).

The Ministry of Local Government and Modernisation approved the decision on 20 December 2013, rejecting an objection from a neighbouring municipality over the amount of housing allowed and the amount of farmland used.

3.3. Methods

The conversion of farmland in Trondheim's municipal land use plan has been analysed as a ‘situation of inquiry’ (Clarke et al., 2015). Following the stepwise deductive-inductive method described by Tjora (2013), the study has moved back and forth between material and analytical levels. The situation was mapped to make sure that all relevant data describing it were collected. The decision to develop farmland was set at the centre, and different sources of data were explored and sorted. At this early stage, I observed conferences, debates, and meetings as well as surveyed the media coverage of the case, drafting notes and messy initial maps. Then, I laid out a timeline, mapped the actors involved and outlined the arenas for decision making, as well as constructed an overview of documents from different stages in the process that seemed especially relevant to the discourse. The maps contained individual human actors, media actors, political elements, governmental bodies, non-governmental organisations and spatial elements in the situation, as well as implicated non-human actors—that is, objects that play an active role in the narrative (Clarke, 2009). To ensure validity and prevent cherry picking of cases, the mapping continued from the initial data gathering process throughout the analysis, moving from messy to ordered versions and from broad mapping of institutions and arenas to detailed mapping of themes in the material. Specifically, I used different versions of positional maps to lay



Fig. 1. Aerial photograph of the city of Trondheim with the Øvre Rotvoll and Overvik farmland highlighted (Norge i bilder, 2017, CC BY 4.0.).

out contested discourses and positions taken (Clarke et al., 2018). The data was analysed to identify the positions of significant actors, relationships between the elements of debate and relations of power (Phillips and Hardy, 2002). Based on this, I selected to pursue “farmland conversion to fight climate change” as one theme or position, due to the importance this argument appeared to have in the empirical situation. The climate argumentation was simple with clear responsibility and extremely specific economic and political goals, whilst farmland was experienced as complicated, with unclear responsibility and few benefits for the municipality. The main sources of data for this article were thus selected based on the nodes, arenas and actors identified in this positional map, and consists of 1) text data (municipal reports, letters between governmental bodies, minutes and resolutions from meetings of the municipality's governing bodies and private consultancy reports) and 2) interview data from actors involved in the process in different ways (21 in-depth interviews with local politicians, planners, property developers, non-governmental organisations, regional government officials and state government officials).

The interviews lasted for approximately 1 h. Themes ranged from open questions about the farmland conversion process and the informant's role in the procedure to more detailed questions on nodes that arose from the initial maps, such as the role of and responsibility for farmland, climate change, housing development and municipal and developer economy. The recorded interviews were then transcribed and coded. An initial thematic coding and a final analytical set of codes focused on major contested issues, discursive constructions and symbolic elements. The discursive constructions identified were “conflict between different types of nature conservation”, “viability of different policy measures for farmland preservation” and “food as commodity or common good”. This article describes the discursive construction that seemed to be key for the decisions that were made: “farmland conversion to fight climate change”. The most central materials to portray the discursive constructed narrative that justified where housing should be built were the accounts from central politicians, planners and municipal documents. The other actors interviewed, civil society and government officials on different levels, were a bit further away from

the discourse. Nevertheless, their accounts were still used in the analysis, although they were not so visible in describing the components in the narrative.

4. Farmland conversion to fight climate change

This section will describe the discursive elements central to the decision about where housing should be built. The analytical question has been to look for how farmland conversion is justified by politicians before the decision in the City Council in the Trondheim area plan process. First, I lay out the argument that the farmers who have become property developers were successful in justifying conversion of their farmland and selling the idea to the politicians. Then, I show how a planning-like jargon was effective in appropriating the discourse to the political arena, and how farmland was made invisible in the process. Finally, I point out some key drivers in the process, namely a hidden political motivation in securing more inhabitants, coupled with a rewarded and institutionalised transport policy, and the manner through which private interests gained steady access to politicians, whilst planners were kept at arm's length.

4.1. What was argued?

The farmers who have become property developers and their consultants delivered the central knowledge claims for why housing development on the farmland in question was a good climate option; the central instrument for this was consultancy reports. Important in the argument was how available development options were narrowed down to two: development in outskirts on high quality farmland or development in neighbouring municipalities. These two options were compared by how many climate gases an inhabitant in each area would produce. A central driving force for narrowing down the discourse to these two options was how the options posed a threat to municipal politicians due to the loss of inhabitants and accompanying tax income. This section will demonstrate how housing on this particular farmland was positioned as the only option for saving the world, and how this

was supported by a central thesis that this option would lower CO₂ emissions from transport. Later, I will show how behind these environmental values was an economic value.

Discursively, a choice was posed between solving two problems: saving farmland or saving the planet from increased levels of the greenhouse gas carbon dioxide (CO₂). As a former planning leader put it, “Should you save a layer of earth or the Earth? This is the challenge”. In this way, a global and abstract environmental argument prevailed over a more local and concrete environmental argument. The key political argument behind farmland conversion was that housing development on peri-urban farmland is climate-friendly. The key to why this argument was accepted as valid was the approach through which different alternatives were presented and perceived. Instead of talking about densification as an alternative to farmland conversion, the only alternative visible in the political discourse was that new inhabitants would settle in neighbouring municipalities instead. A politician succinctly stated this line of reasoning: “We think that it’s more environmentally friendly to keep growth within Trondheim than to distribute it to Melhus and Malvik” (Politician 2). Social processes constructed claims about where housing should be built in Trondheim. This discourse posited that development within the existing city limits would be “impossible and ugly”, and that expansion into the outskirts represented a form of densification.

4.1.1. CO₂ emissions separate alternatives

Calculations from the Chief Administrative Officer in Trondheim municipality stated that sufficient area for future housing development was available within existing built-up areas. Nevertheless, the politicians chose to dismiss these calculations. Instead, the politicians adopted a knowledge claim that was promoted heavily by developers: that the urban area was unfeasible for development and that families will choose to buy peri-urban houses in neighbouring municipalities instead. The only option that seemed to be available in the discourse was the development of the city forest area, something that is very unpopular. Thus, building on farmland seemed like an option that was deemed to happen.

Because the growth in Trondheim is tremendous. Slightly decreasing now, but still, there is a need for a greater area than what the City Councillor has added. As we saw it. And so, in Trondheim, there is not much rock and outfield except in Bymarka [city forest area], and we do not want to expand the residential zone into Bymarka. (...) It is unwise both in terms of outdoor interests and in relation to environmental interests. (Politician 1)

The basis for the decision making was then narrowed down to one number: projected CO₂ emissions. The comparisons between different housing development possibilities turned almost entirely on this factor. Oddly, the greenhouse gas emissions resulting from the urban development of farmland were entirely absent from this calculus. Rather, the amount of CO₂ emitted if farmland were turned into housing and offices was compared to the amount of CO₂ emitted if new inhabitants chose to live in neighbouring municipalities. It was based on current energy sources, technologies and modes of transport, disregarding not only the possibility of changing these patterns but also the fact that they are currently shifting. The measure was universally accepted, and its underlying assumptions and limitations were not questioned. The CO₂ emission measure can, in this way, be understood as a powerful non-human actor that legitimates the interests of powerful actors.

A central prerequisite in the social process is that the climate argumentation is only true under one condition: that the only alternative is housing on areas further away from the city centre. The more climate-friendly alternative was dismissed as unfeasible, even though the Chief Administrative Officer proposed to cover the projected population increase by increasing housing density within city boundaries on the identified available areas.

4.2. How was it argued?

The property developers initiated the narrative in a planning-like jargon. The narrative also rested on components of a transport policy that receives economic incentives from the central government. How housing on the farmland in question is viewed as based in facts and serving multiple purposes is important to make it appear to be a good option amongst the politicians.

4.2.1. Planning terminology gives legitimacy

Arguments made in the consultancy reports gained a foothold amongst politicians by using planning terms in a way that justified the results they advocated. A former Head of City Planning explained that the use of planning terms was more specious than objective: “They make pictures for people to believe in that are not genuine, yet are taken at face value as a professional analysis. But, in my opinion, it’s quite quasi”.

For example, the “collective axis”, a circle drawn on the map of Trondheim, makes the location of certain functions seem logical or even unavoidable. Since the farmland proposed for development is already traversed by major roadways, a politician explained, the site “had the best environmental impacts in relation to emissions, as it was close to public transport” (Politician 1).

Reports described the current situation as “road spaghetti”. The previous policy for housing development was characterised as a “here and there policy”, a deeply negative phrase denoting a pattern that was based on ideology rather than knowledge with numerous deleterious side effects. The preservation of the Rotvoll urban farmland as part of Trondheim’s policy during the previous decades has been described as “random”, “incoherent”, “skip-over” and “blobbing” (Selberg *Arkitekt*, 2011). These reports described farmland in a negative way, and the development proposal was presented as bringing order to what was depicted as chaos.

4.2.2. Farmland is invisible

According to Adele Clarke et al. (2015), what was not said in a discourse can be as important as what was said. In this study, it is especially interesting how farmland can be analysed as an implicated non-human actor because of the way it is portrayed and understood by those in power to determine its future, even though farmland is profoundly dependent on human use to continue as farmland. When studying documents, media and meeting debates, farmland as a topic was remarkably absent from the discourse. When asked specifically, farmland preservation was considered important by all actors interviewed, but, to the majority of politicians, not important enough in this specific case. They saw farmland preservation as important on a national level, but they did not see it as their responsibility. As one planner said: “Interestingly, politicians also say that farmland preservation is important, but it is different when push comes to shove”. They express support for the idea, but there is little willingness to take action.

Agricultural organisations, environmental organisations and development organisations found that their engagement started too late in the area decision process, and that they were unable to affect the way farmland was understood. As one development organisation leader put it: “It’s a bit late to start campaigning when everything has been decided”. The organisations experienced that the politicians with the power to decide the future of important farm areas view farming as a quaint, but obsolete, activity. In this understanding, agriculture is better suited to countries with a more temperate climate, and Norway can import its food from them. Therefore, the role of farmland in the local and regional agri-food network is not considered.

For the politicians, farmland becomes invisible in the shadow of the city as a growth machine. The spatial expansion of cities is viewed as so inevitable that the preservation of peri-urban farmland is only seen as delaying a development that will happen anyway: “Farmland

preservation is important in some areas, but a city must grow (...) I know the Parliament has said that we should grow more food, but when it's so urban, we must make an exemption" (Politician 2).

The following section further elaborates on factors that I found to drive *why* the climate narrative evolved.

4.3. Why was it argued?

A hidden municipal economic motive was central to the prerequisite of the climate narrative. In this section, I will expose how a climate calculation was effective in securing hegemony in a discourse of city development concealing a neoliberal motive from municipal politicians in securing new inhabitants. An institutionalised transport policy was also used discursively to claim that development on these areas was densification, effectively disguising that available ground for new housing was available inside the built-up area. Last, the way the planner's knowledge claims are viewed compared to the knowledge claims delivered from market actors also appears to have contributed to the decision.

4.3.1. Competition for inhabitants between municipalities

The economic motivation of the property developers is obvious: The potential profits of converting farmland to urban uses are enormous. The politicians' economic motive is less apparent but nonetheless important: The municipal budget would benefit. This consideration is not expressed in official documents but becomes clear in the way the informants talk about their motivations and considerations. The central storyline is the threat that families will choose to reside in neighbouring municipalities if Trondheim does not provide attractive neighbourhoods and housing types. "If we are going to have all housing construction in the small municipalities around us, we will never reach the goals on reduction in CO2 emissions" (Politician 1).

Even though CO2 emissions are the official argument, securing additional municipal tax revenue seems to be a more powerful one. In the practical reality of day-to-day politics, economics is king. The municipality collects taxes only from people who reside in the municipality, not from those who commute into the city to work but live in adjacent municipalities. A coalition politician revealed this line of reasoning when he pointed out that a regional hyperlink train could be a possible alternative to farmland conversion, but it was unfeasible for financial reasons: "Because we cannot build infrastructure for anyone commuting to the city without receiving tax revenues from them. We cannot. Then we will go bankrupt" (Politician 1). The municipal tax base is a prime consideration when local politicians consider solutions to complex environmental problems.

4.3.2. Support of established transportation policy

Incentives for public transport seem to work against farmland preservation. These incentives are used discursively to support a sprawl strategy that it was designed to counteract.

Lowering CO2 emissions is the measure used to show the success or failure of the transport policy "Greener Trondheim". As a broad political compromise amongst the Labour, Socialist Left, Centre, Christian Democratic, Conservative, Green, Red and Liberal parties on environmentally friendly transport, "Greener Trondheim" has been successful in moving people from cars to public transport. The municipality has gained a great deal of income from incentives for increasing bus usage. This goal is an integral part of the city's overall policy: "Development of new areas must be considered against the goal to make traffic increase on environmentally friendly transport, according to the reward agreement in Greener Trondheim" (Minutes, Building Council, 01.04.2014).

The narrative about greenhouse gas emissions is based on the "Greener Trondheim" discourse. This environmentally friendly transport policy is so important to some of the parties that they will go to great lengths to protect it in other policy matters. In this narrative,

building on farmland is framed as the best solution for the environment, and it is packaged as part of an environmentally friendly city development discourse.

4.3.3. Fear of technocracy, lobbying as democratic

Building new houses is treated as a more urgent matter by politicians than by planners. The municipality's planners have been criticised as failing to "take on the challenges facing the municipality in the years to come"; thus, planners' efforts must become "more aggressive". The municipal planners work on the basis of predictions for future population that fall between the highest and lowest possible growth rates, whereas the politicians want to plan for highest potential growth. Behind this difference, I identified a conflict between the values of bureaucratic expertise and democracy. Politicians characterise "professional" planning as undemocratic and keep bureaucrats at arm's length. The politicians are reluctant to talk to the municipal planners or attend their meetings because they believe that they, rather than the bureaucrats, should rule the municipality.

Their attitude toward lobbyists is quite different. They see inviting them into the process as a democratic way of serving the public, although others regard them as representing private interests. A politician said: "There is no problem for anyone who wants to meet politicians. I am very much in favour of lobbying. Lobbying has such a bad reputation, but it is for informing the elected people, although there must be transparency" (Politician 2). As far as the municipality's staff was concerned, however, he expressed caution: "Yes, they are welcome, but at the same time, we should be very careful not to instruct or be instructed." He continued, "There must be a bulkhead between [us]. They must act based on what they have learned in the textbook, and we must follow our party program".

The property developers enjoy direct access to the politicians by hiring consultants with connections who can advance arguments on their behalf. According to the former Head of City Planning:

There are counsellors other than those in the municipality of Trondheim whom the politicians actually listen to. Advisors from the developers get a completely different access to the political corridors than the municipalities' own planning experts do. The planning experts in the municipality must follow the correct paths in relation to political information. Although a developer can only ask for a meeting (...), most of the time, he will get it.

The consultants hired by the property developers chose a line of reasoning that is in accordance with the dominant discourse about building houses near existing roads and public transport. The former municipal planner explained:

They run an argument that is similar to what we do, but it is appropriated to the developers' interests. This is not so easy for a politician to discover, but we see it quite clearly. Still, the argument is based on the same criterion, i.e. on reduced transport. So, they follow the same lines, but there are a few other angles.

In the dominant discourse, the preservation of farmland is framed as opposing climate-friendly urban development. This way of thinking assumes that it is impossible to preserve farmland and reduce CO2 emissions at the same time.

5. Discussion

Farmland is a threatened resource both locally and globally. Despite rising competition to acquire agricultural land to produce food for a growing population on a global scale, urban sprawl continues to destroy farmland on all continents. Paradoxically, this study shows how environmental narratives can render farmland more vulnerable, as well as displays the extremely weak position that farmland preservation plays in local politics. Knowing that agricultural land has an extremely strong

legal protection in Norway compared to most countries, this situation becomes even more notable. Despite Norway's strict farmland law, local politicians are allowed to argue for exceptions, which opens up interpretations and their exercise of power. I reveal a market-driven narrative that built legitimacy for a decision (Czarniawska, 1997) and its economic, institutional and cultural drivers.

Situational analysis of political decision making in the Trondheim case shows how a narrative centred on a global environmental problem controlled the debate about conversion of farmland to urban uses. Indeed, the irreversible loss of farmland was not framed as an environmental issue at all. Rather, lowering CO2 emissions by building houses near existing transport routes legitimated its development. A story of municipal economy connected the dots in an equation that made farmland conversion appear as a necessary climate change mitigation measure. The dubious but authoritative-sounding knowledge claims made by the developers' consultants established an internally logical argument for farmland conversion that seemed to make environmental sense. Scrutinising this justification from the perspective of other participants, however, revealed participants' ulterior motives. The power of municipal self-interest is evident in the fact that the environmental impact equation was formulated in terms of competition with other municipalities, rather than in terms of alternative uses for the land. What Molotch defines as “real politics”, “the process where goods and services are distributed in society” (Molotch, 1976: 313), was key, but it played an entirely hidden role in both the definition of the problem and its solution.

The analysed situation of inquiry thus included both agency and discourse – agency as farmers who have become property developers aim to seek profit and as politicians who want to increase the number of tax-paying inhabitants in their municipality. Discursively, we see a climate imperative pushed by consultants hired by developers that is attached to institutionalised planning jargon and incentives for environmentally friendly transport. This analysis provides evidence for Foucault's (1972) theory that discourse is rooted in and creates culture, and that institutions and their language reinforce its power. The climate imperative has become a “truth”, and its prerequisites as well as developers' and politicians' agency are hidden, something that secures its power.

In the process of decision making, the abstract measure of CO2 emissions simplified a complicated issue. Measures were used to set alternatives against each other, effectively hiding options that could have shifted the debate, such as the fact that there was available area inside the city boundaries to accommodate the estimated population growth for the next 15 years. The narrative thus contributed to the ignorance of the most climate-friendly option for housing areas: urban densification. The irrelevance of this fact to the discussion demonstrates that the main consideration was the city's population growth in relation to other neighbouring municipalities, not climate-friendly housing locations.

Power is exercised in a subtle way by using planning language and metaphors to increase legitimacy and incorporating an established and rewarded policy into the narrative. Moreover, when the expert advice of the municipality's own planners did not serve the politicians' interests, they turned to the property developers' lobbyists and rationalised doing so as a form of democracy. In their view, the proposal to convert farmland into residential and office development addressed immediate issues of housing and transport, promoted the city in its competition with adjacent municipalities, and promised to increase the city's tax base and revenue from national incentive programs.

There is a neoliberal turn in allowing actors from the property market to deliver the knowledge claims for housing areas against the advice from the municipality's own planners, as well as to permit municipal economic motives to motivate housing areas disguised as climate-friendly motives. Hegemony of neoliberal discourse contributed to the central government's assent to the municipality's decision to develop this high quality farmland. In an economic-centred discourse,

farmland was considered “too light” compared to the weight of real politics. Thus, farmland was not considered a valuable resource in either monetary terms or symbolic terms, whereas reducing CO2 emissions was counted for both. Furthermore, the politicians regarded food and agricultural policy as so peripheral that they refrained from engaging in it at all. Whilst this decision served multiple private and municipal financial interests along with the climate agenda, farmland preservation served no other interests but stood as an end in itself. Politicians' silence on the matter of farmland protection together with their evident lack of commitment to the issue when asked about it generally indicates that they see farming as a national rather than a local responsibility. Other issues for which the municipality has primary responsibility are more pressing locally. This political ignorance towards the role farmland plays in food provisioning implies a serious disconnect between the food producing resource and the local food system (Brinkley, 2017; Newman et al., 2015).

6. Conclusion

Farmland is a key resource in regional agri-food networks, and its situated quality makes its preservation vital. This study revealed how climate change is used as an alibi for economic interests in the push for farmland conversion on peri-urban farmland. Exploring a social process of micro politics, the article finds a neoliberal logic that permeates an area discourse where farmland as a natural resource is made invisible. Discourse is created by power struggles, and it is the invisibility of these relationships that secures power and hegemony (Fairclough, 1995). This reduction of complex issues to simple equations with seemingly incontrovertible solutions makes it easier for politicians to make decisions. In a context of increasing uncertainty coupled with information overload, this is an effective and attractive strategy, but it is also dangerous because important considerations can be lost. The hegemony of count-and-measure specifically and neoliberal ideas in general can lead our society to miss out on sustainability opportunities that are not so easy to quantify, in this case, a possibility to both preserve farmland and develop real climate-friendly housing areas. How can we then better foster farmland preservation and sustainable food systems for urban areas? A key recommendation supported by the study is to build bridges between farmland and the urban population, for example, with programs that promote local awareness of the productivity of nearby farmland in terms of everyday foodstuffs. By integrating emerging local food movements with farmland preservation, farmland may reclaim its vital role in the suburban landscape, an approach proven necessary for other successful farmland preservation attempts (Perrin, 2013; Newman et al., 2015; Wittman et al., 2017). I will argue that the generation of more just, open and democratic decision making about farmland that serves our common interests in environmental sustainability and food security can lead to compatible goals that are placed in competition only by discourses that serve private interests by pitting them against one another.

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